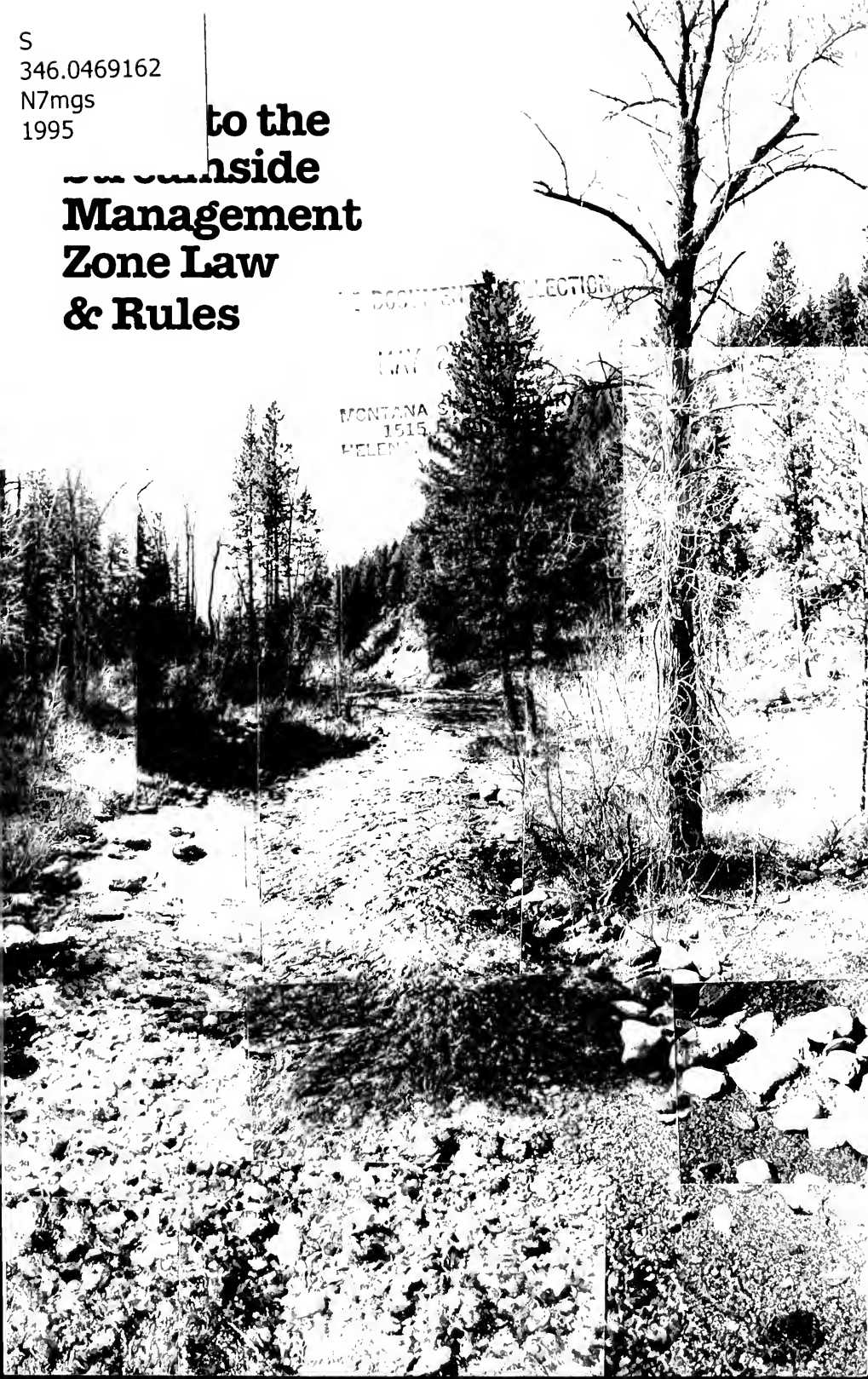


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# to the Inside Management Zone Law & Rules





# Contents

**M**ontana is a state blessed with an abundance of natural resources.

Its forest lands supply the state with beauty and act as a collector, filter, and distributor of clean water on which plants, animals, and humans depend.

A streamside management zone, or "SMZ," is a buffer strip that serves as a natural filter which helps to keep sediment out of the stream.

Improper timber harvesting in the SMZ can cause erosion and water quality problems.

With this in mind, the 1991 Montana legislature passed the Streamside Management Zone Law. The law also mandated the development of administrative rules which became effective March 15, 1993.\*

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\* This booklet addresses only the Montana SMZ Law and Rules. Other federal, state or local laws may apply to your operation.

# Introduction: The SMZ Law and Rules

The SMZ law establishes a Streamside Management Zone (SMZ) along each side of a stream, lake, and other bodies of water (OBW).

The SMZ law applies only to drainages that meet the definition of a stream, lake, or OBW, and only to forest practices that meet the definition of a timber sale.\*

It is the responsibility of the landowner to comply with the SMZ law unless that responsibility has been transferred through a written contract.

This booklet is intended to explain and illustrate the SMZ law and rules, not to replace them. The complete set of administrative rules is printed in the back of this booklet.

## **The law prohibits 7 forest practices in SMZs.**

1. Broadcast burning;
2. The operation of wheeled or tracked vehicles except on established roads;
3. The forest practice of clearcutting;
4. The construction of roads except when necessary to cross a stream or wetland;
5. The handling, storage, application, or disposal of hazardous or toxic materials in a manner that pollutes streams, lakes, or wetlands or that may cause damage or injury to humans, land, animals, or plants;
6. The side-casting of road material into a stream, wetland, or watercourse; and
7. The deposit of slash in streams or other water bodies.

\* The SMZ Law does not apply to cutting wood for personal use or other land management activities that do not qualify as timber sales.

# Definitions

For the full set of definitions used in the SMZ rules see pages 26-28.

**Bench:** An area where a steep slope greater than 35% levels off to a gentle slope of 15% or less for a width of 30 feet or more.

**DBH:** Diameter at Breast Height. Measured at a point 4 1/2 feet off the ground on the uphill side of the tree.

**Established road:** A road that a highway vehicle can safely operate on without doing any work except:

- clear vegetation;
- remove any access barriers;
- replace any stream crossing or drainage structures that were removed to restrict access; or
- grade the road surface.

**Hazardous or toxic materials:** Substances which by their nature are dangerous to handle or dispose of; a potential environmental contaminant, including petroleum products, pesticides, herbicides, chemicals, and biological wastes.

**OBW:** Other Body of Water. Ponds and reservoirs > 1/10 of an acre; irrigation and drainage systems that discharge directly

into a stream, lake, or other surface water. "Water bodies used solely for treating, transporting, or impounding pollutants shall not be considered surface water."

**OHWM:** Ordinary High Water Mark. The location on a stream bank, lakeshore or OBW where the water level normally reaches during peak flow.

**Salvage:** means harvesting trees that have been killed or damaged or are in imminent danger of being killed or damaged by injurious agents other than competition between trees.

**SMZ:** Streamside Management Zone. A zone of variable width along each side of the stream, lake, or other body of water.

**SMZ-slope:** is measured from the OHWM to a point 50 feet away and perpendicular to the stream.

**Stream:** "A natural water-course of perceptible extent that has a generally sandy or rocky bottom or definite banks and that confines and conducts continuously or intermittently flowing water."

"Perceptible extent" means that 50% of a 100-foot segment meets the definition of a stream.

**Timber sale:** "A series of forest practices designed to access, harvest or regenerate

trees on a defined land area for commercial purposes."

**Toe of fill:** The downhill edge of the road fill.

**Wetlands:** Areas that remain wet long enough to support a prevalence of plants that need saturated soil conditions. Wetlands include marshes, swamps, bogs and similar areas.

## Stream Classifications

The SMZ law and rules apply only to drainages that meet the definition of a stream, lake, or OBW.

Streams are classified in segments. Variable conditions can cause a stream to be made up of any combination of stream segment classes.

**Class 1 stream segments** have the highest level of protection. There are two ways to determine a Class 1 stream:

1. The stream supports fish, or
2. The stream normally flows during six months of the year or more **and** contributes surface flow to another stream, lake, or OBW.

### Class 2 stream segments

have an intermediate level of protection.

By definition they are streams that do not qualify as Class 1 or as Class 3.

Two examples of Class 2 streams are:

1. Stream segments that **do not** support fish, and normally **do not** have surface flow six months of the year or more, but **do** contribute surface flow to another stream, lake, or OBW.
2. Stream segments that **do not** support fish, and normally **do have** surface flow six months of the year or more, but **do not** contribute surface flow to another stream, lake, or OBW.

**Class 3 stream segments** have the lowest level of protection.

They contain no fish; rarely contribute surface flow to other streams or OBW; and normally do not have surface flow six months of the year or more.

### Symbols used in this booklet:

- < means less than.
- ≤ means less than or equal to.
- > means greater than.
- ≥ means greater than or equal to.

**Notes:** Use the "SMZ Field Guide" on pages 24-25 to help identify stream segment classes.

# Basic SMZ Widths

SMZ widths are directly dependent on SMZ-slope and stream class.

## Class 1 and 2 streams:

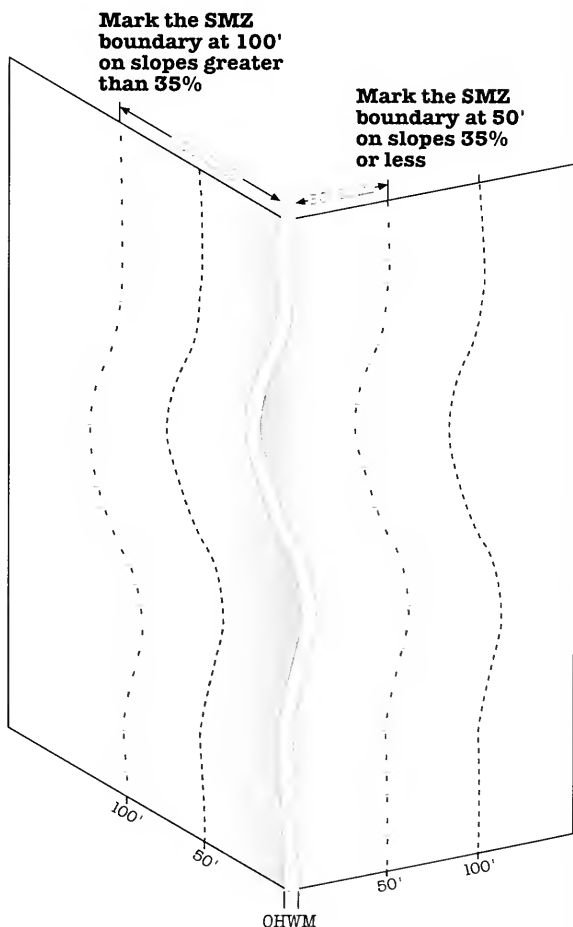
- On SMZ-slopes less than or equal to 35%, the SMZ boundary is 50' (slope distance)\* from the OHWM.
- On SMZ-slopes greater than 35%, the SMZ boundary is 100' (slope distance) from the OHWM.

## Class 3 streams:

- The SMZ boundary is 50' regardless of the SMZ-slope.

## SMZ Widths for Different Slopes

Class 1 & 2 Streams

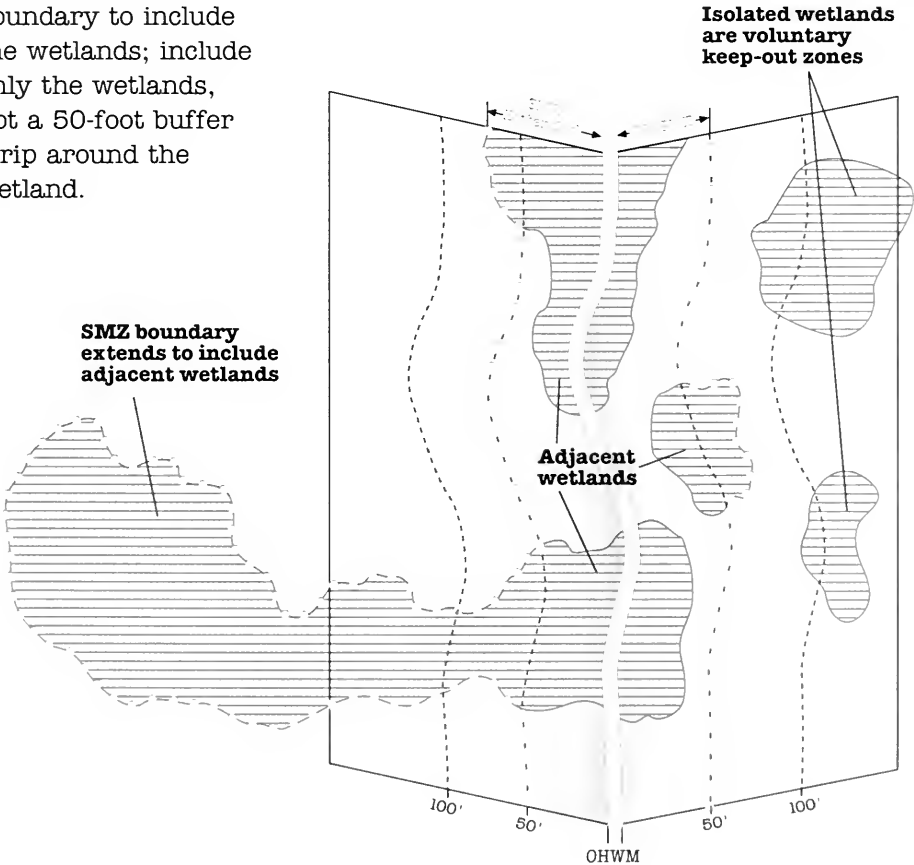


\* **Slope distance** means the length of a line between two points on the land surface.

# SMZ Widths for Adjacent Wetlands

Where the normal SMZ boundary (either 50' or 100') intercepts a wetland, extend the SMZ boundary to include the wetlands; include only the wetlands, not a 50-foot buffer strip around the wetland.

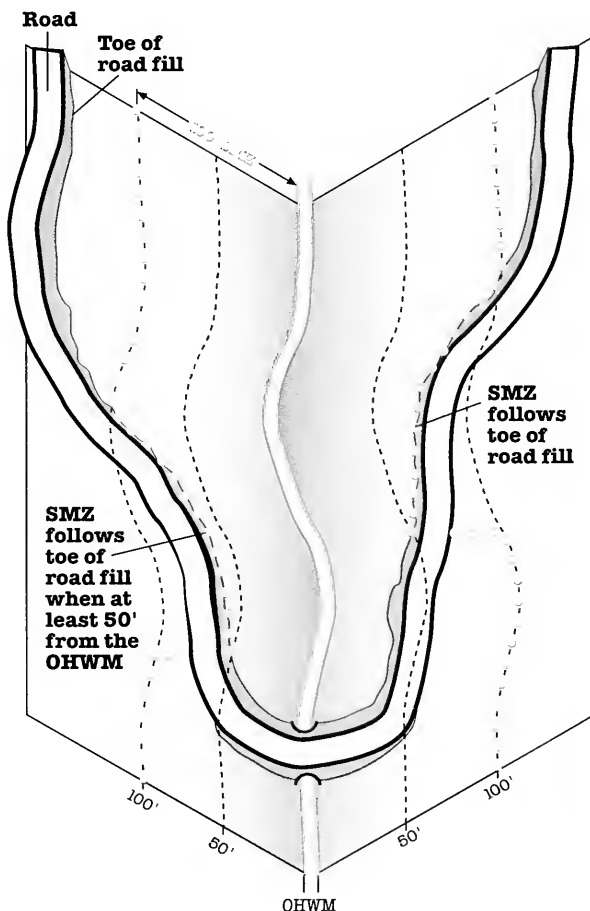
## SMZ Widths for Wetlands Class 1, 2 & 3 Streams



There are two exceptions  
for the 100' SMZ's.

- When a road exists between 50' and 100' from the OHWM, the SMZ boundary shifts to follow the toe of the fill.
- Otherwise, the SMZ boundary remains at 100' from the OHWM.

Class 1 & 2 Streams,  
SMZ-slopes Greater than 35%





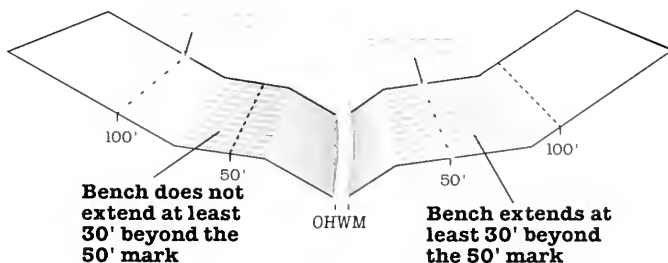
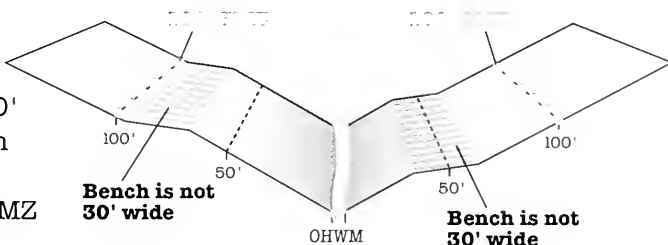
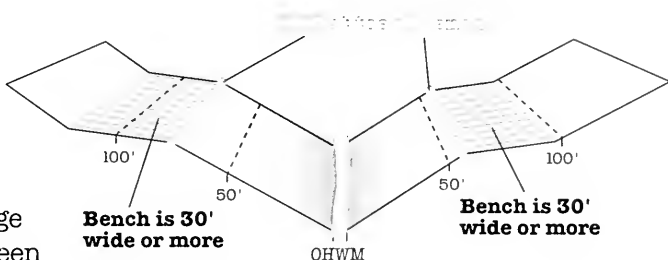
## 2. Bench exception to 100' SMZ's:

- If the ground slope within the 100' SMZ decreases to 15% or less for a width of 30' or more to form a bench, then the SMZ boundary is the edge of the bench nearest the stream when the edge of the bench is between 50' and 100'.

- If the bench begins within 50' of the OHWM and 30' or more of the bench extends beyond the first 50', then the SMZ boundary is 50'.

## SMZ Widths for Benches

Class 1 & 2 Streams,  
SMZ-slopes Greater than 35%



# Summary: SMZ Widths

# SMZ Boundary Marking

- In all cases, the minimum SMZ width is 50'.
- If wetlands touch the SMZ, then **extend boundary to include wetlands.**
- Class 3 stream and OBW, **SMZ = 50 feet.**
- SMZ-slopes less than or equal to 35%, **SMZ = 50 feet.**
- SMZ-slopes greater than 35%, **SMZ = 100 feet**, except:
  - ...when an established road occurs between 50' and 100', **SMZ = toe of fill.**
  - ...when at least 30' of bench occurs between 50' and 100', **SMZ = downhill edge of bench or 50' whichever is greater.**

SMZ boundaries must be clearly marked on Class 1 and Class 2 stream segments when forest practices that are prohibited within the SMZ will be conducted next to the SMZ.

For example: Tractor skidding is taking place in a cutting unit that has a SMZ in it. Mark the boundary to prevent equipment from entering the SMZ.

"Clearly marked" means marked with paint, ribbon or similar means so that an equipment operator can easily see from one mark to the next, even under winter conditions.

This requirement is intended to prevent accidental violations.

Class 3 stream segments do not need to be marked.

**Note:** Use the "SMZ Field Guide" on pages 24-25 to help determine the SMZ width.

# Operation of Wheeled or Tracked Equipment Is Prohibited in the SMZ

There are three exceptions:

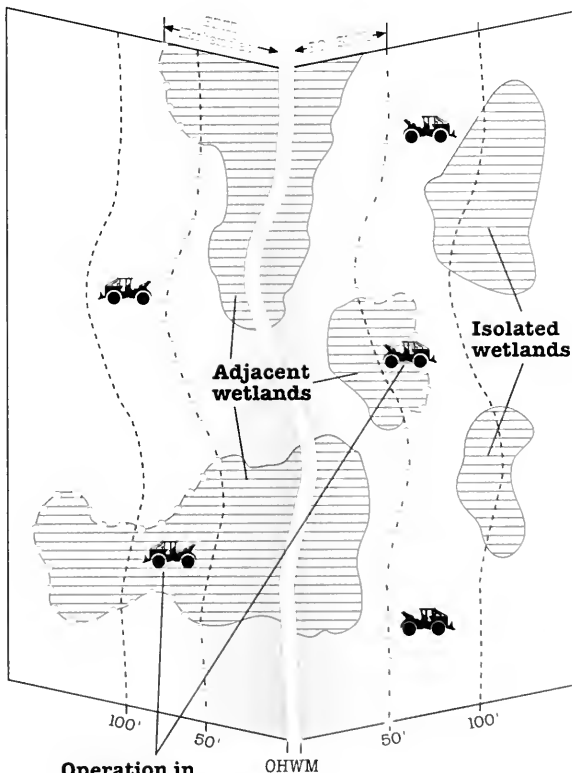
## 1. Exceptions for equipment operation in Wetlands.\*

ONLY UNDER ALL OF THE FOLLOWING CONDITIONS can equipment operate in wetlands included in the SMZ:

- When the ground is frozen or there is adequate snow.
- The equipment does not come within 50' of the OHWM.
- The equipment does not rut or move any soil.
- Stumps are not removed.
- Shrubs and submerchantable trees are protected.
- The integrity of the SMZ is conserved.

## Equipment Operation in Wetlands

Class 1 & 2 Streams



**Operation in adjacent wetlands under winter conditions only**

\* This booklet addresses only the Montana SMZ Law. Other federal, state or local laws may apply to your operation.

# Operation of Wheeled or Tracked Equipment Is Prohibited in the SMZ

There are three exceptions:

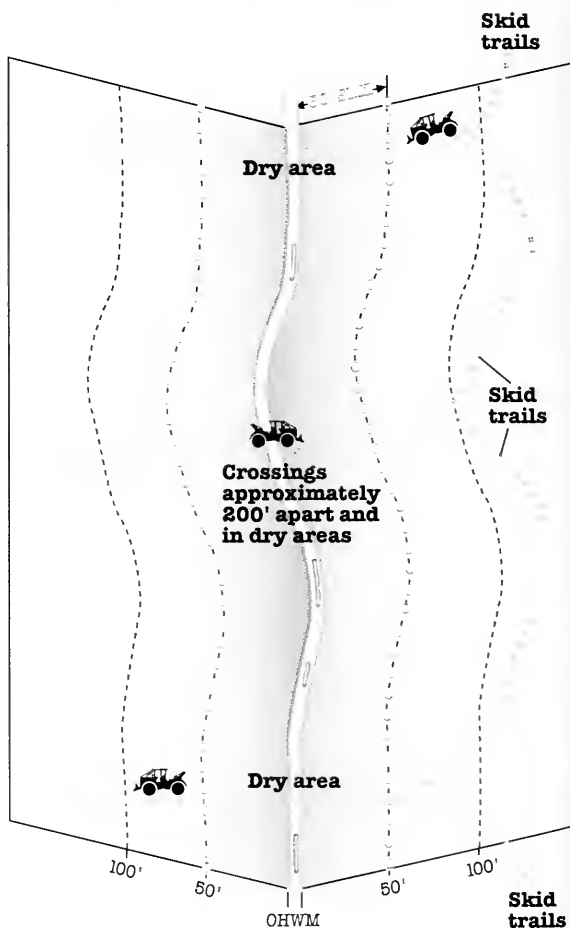
## 2. Exceptions for equipment operation on Class 3 Stream segments only.

In order to minimize road construction and skid trails, an equipment operator may cross the SMZ on Class 3 stream segments when:

- crossings are located approximately 200' or more apart, and in dry areas with stable banks and bottoms.
- excavation is minimized.
- the distance traveled through the SMZ is minimized.
- crossings occur only during periods when the stream is dry.
- the capacity of the stream channel or OBW is maintained.

## Equipment Operation across Class 3 Streams

And Other Bodies of Water



### 3. Exceptions for equipment operation on established roads:

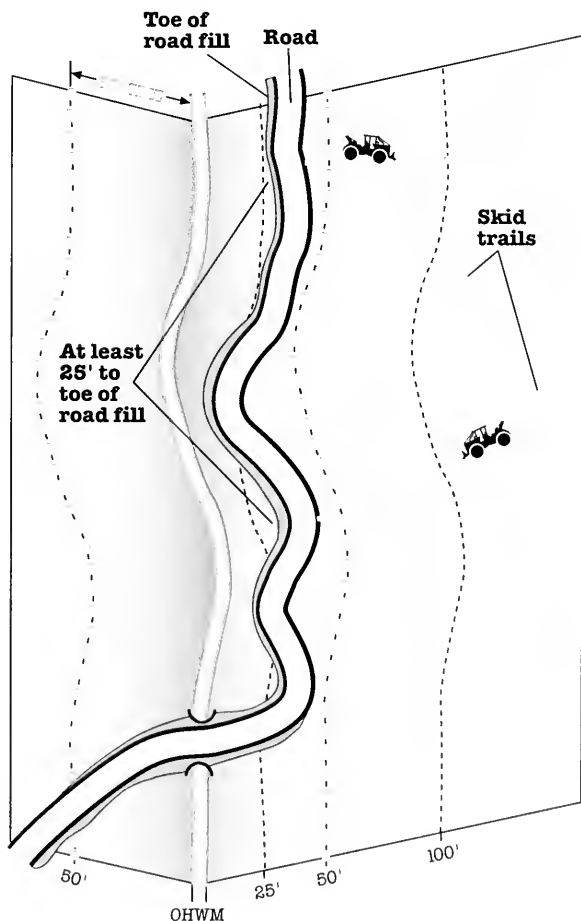
Any logs removed from the SMZ must be fully suspended while crossing the stream, lake, or OBW.

Equipment on existing roads within the SMZ can be used to winch logs out of the SMZ.

In order to minimize road construction and skid trails on Class 1 or Class 2 stream segments, equipment may be operated inside the SMZ off established roads on the side away from the stream whenever:

- an established road exists inside the SMZ; and
- the toe of the fill nearest the stream is 25' or more from the OHWM.
- Locate designated skid trails approximately 200' apart.
- Reclaim skid trails with erosion controls and vegetation.

### Equipment Operation from Established Roads



# Summary of Equipment Operation Exceptions

## **For Wetlands:**

- Equipment remains 50' from OHWM.
- Winter conditions exist.
- No rutting or movement of soil.
- Stumps remain.
- Shrubs and submerchantable trees are protected.

## **For Class 3 Streams and OBW:**

- Crossings are approximately 200' or more apart.
- Excavation and distance traveled is minimized.
- Cross only in dry stable areas.

## **For Established Roads:**

- No landings in the SMZ.
- Reclaim skid trails by re-establishing vegetation and putting in erosion controls.
- Locate skid trails approximately 200' or more apart.
- Establish or re-establish road drainage features.
- Deck logs on the side of the road away from the stream.
- Access the road on the side away from the stream and only where the toe of the fill nearest the stream is 25' or more from the OHWM.

# Voluntary Wildlife Guidelines

When the 1991 Montana Legislature passed the Streamside Management Zone (SMZ) Law, it also directed the Department of Natural Resources and Conservation (DNRC) to develop voluntary, non-enforceable guidelines for managing wildlife habitat in the SMZ's.

Many wildlife species make extensive use of SMZ's, even though SMZ's comprise only a small portion of the overall landscape. Wildlife depend on SMZ's for food, cover, travel corridors, and nesting areas. Many species also use the SMZ's during migration as resting and feeding areas.

The SMZ rules already provide for the maintenance of the forest structure and species diversity needed by most wildlife species. However, to enhance these habitat components, DNRC has developed voluntary wildlife guidelines. These guidelines are available through your local service forester. For more information, contact the Department of Natural Resources and Conservation.

# Clearcutting & Retention Trees in the SMZ

## Clearcutting is prohibited in the SMZ.

In addition, a minimum number of "leave" or "retention" trees for each 100 lineal feet of SMZ is required.

## Tree Retention Requirements

The number of trees retained is based on:

- Stream segment class; and
- The number of trees in the first 50' width of the SMZ even when extended for slope; or
- The total number of trees in the SMZ segment when extended for wetlands.

The selection and distribution of retention trees is guided by the following:

### For Class 1 & 2 Streams

- For SMZ's wider than 50', select most retention trees within 50' of the stream. The remaining retention trees may

be left anywhere in the SMZ segment.

- Favor bank edge trees. They protect and shade stream channels and banks.
- Favor trees leaning toward the streams. They are likely to provide large woody debris to the stream channel.
- Maintain a diversity of tree species and size classes that are representative of the pre-harvest stand.
- Protect and retain submerchantable trees and shrubs to the fullest extent possible.
- Hardwoods and snags may be counted toward retention tree requirements in the same approximate proportion as in the pre-harvest stand.

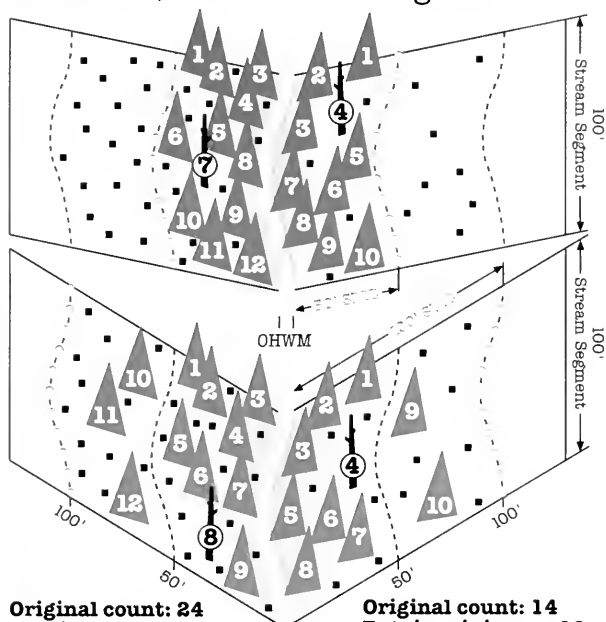
### For Class 3 Streams

- Protect and retain submerchantable trees and shrubs.



## Class 1 Stream

### Retention/100' Stream Segment



"Leave" trees and snags



Stumps of harvested trees

## Class 1 Streams and Lakes:

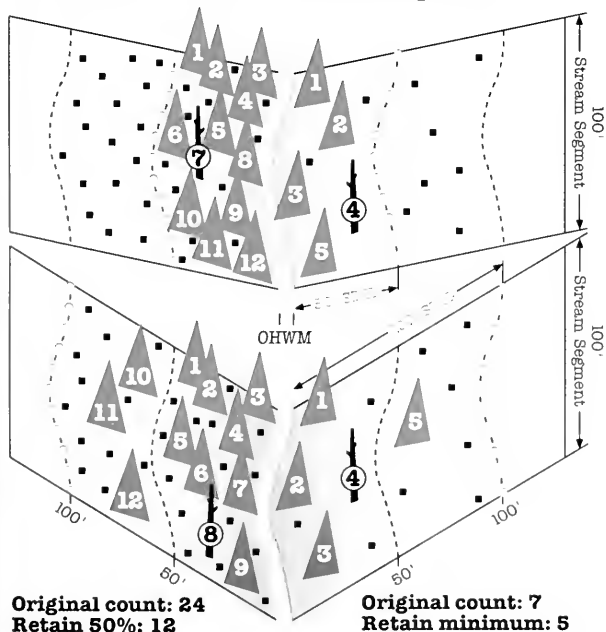
Retain at least 50% of the trees  $\geq 8"$  DBH on each side of stream or 10 trees per 100' segment, whichever is greater.

## Requirements Common to Stream Classes 1 & 2:

- Leave species and sizes that represent the original stand.
- Tree retention numbers are based on the first 50' width of the SMZ.
- Protect and leave shrubs and sub-merchantable trees.

## Class 2 Stream

### Retention/100' Stream Segment

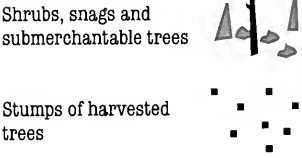


## Class 2 Streams:

- Retain at least 50% of the trees  $\geq 8"$  DBH on each side of stream or 5 trees per 100' segment, whichever is greater.

Class 3 Streams and OBW

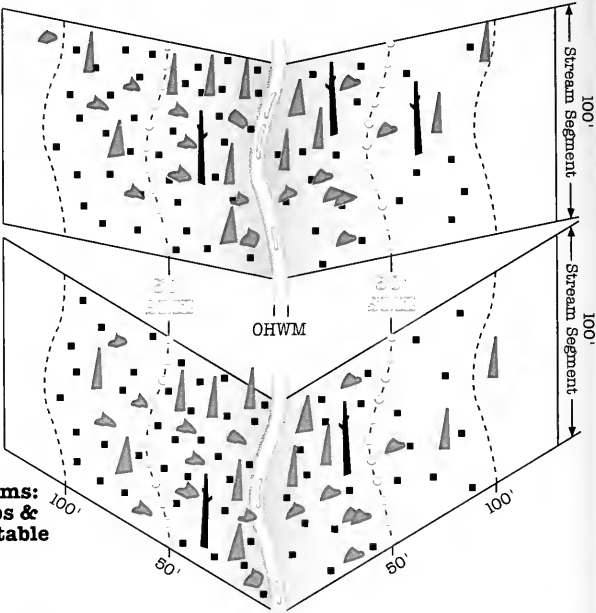
Retention/100' Stream Segment



Class 3 Streams and Other Bodies of Water

Protect and leave submerchantable trees and shrubs.

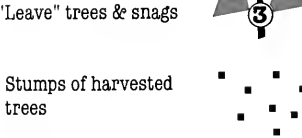
Snag retention is voluntary.



Class 3 streams: Retain shrubs & submerchantable trees

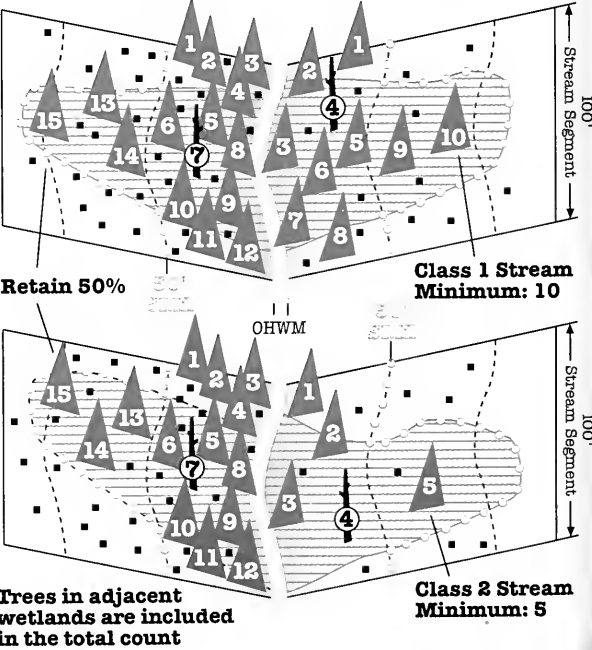
SMZ Extended for Wetlands

Retention/100' Stream Segment



Wetlands

Retention tree requirements for SMZ wetlands are the same as the adjacent stream class, except trees in the SMZ wetlands are included as part of the total count and are subject to the 50% minimum retention.



Trees in adjacent wetlands are included in the total count

"Leave" trees & snags  
(green is alive, orange  
is dead or dying)



Stumps of harvested  
trees

## Salvage

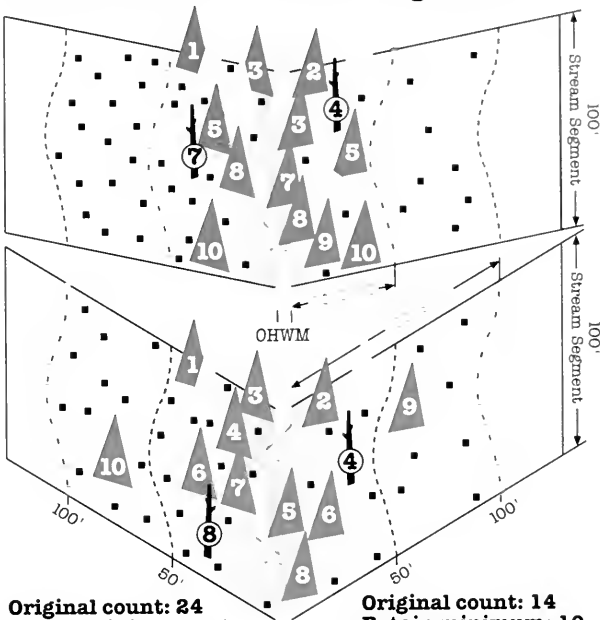
The following rule  
applies only to trees  
meeting the definition  
of salvage.

- On Class 1  
streams, leave the 10  
tree minimum per  
100' segment.
- On Class 2  
streams, leave the 5  
tree minimum per  
100' segment.
- If there are not  
enough standing live  
trees to meet the  
minimum number of  
leave trees, count the  
dead or down trees  
also.
- Leave all trees  
which have fallen  
across or in streams.

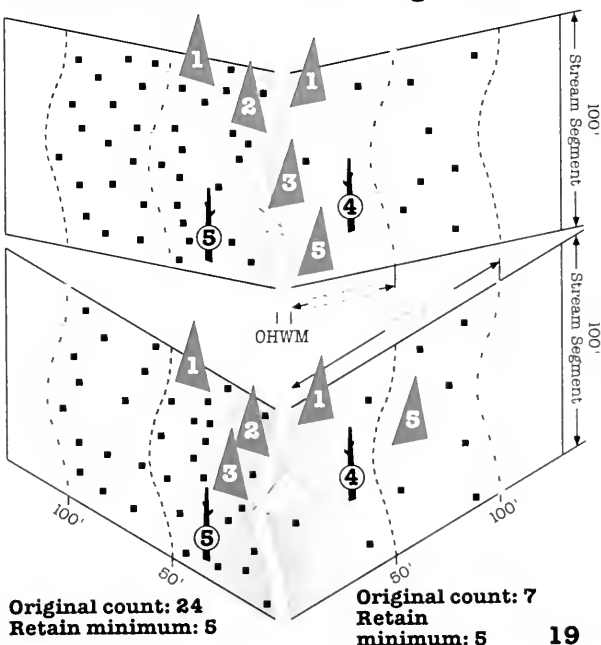
**Note:** Any forest practice which fails  
to meet the tree retention standards  
requires approval of a site-specific  
alternative practice.

For additional information  
on alternative practices,  
contact DNR.

## Salvage on Class 1 Stream Retention/100' Stream Segment



## Salvage on Class 2 Stream Retention/100' Stream Segment



# Road Construction

Road construction\* in the SMZ is prohibited except when necessary to cross a stream or wetland.

- The SMZ law does not determine when "it is necessary to cross a stream." However, road building and equipment operation within the SMZ are restricted by the SMZ law and rules.

- Fill must not be deposited in the SMZ except as necessary to construct crossings.

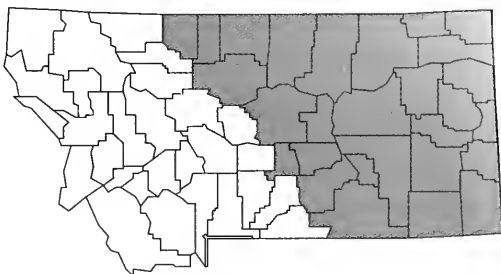
- To construct a road across a perennial stream, an operator needs a 310 permit, which is administered by Conservation Districts.

- Construction of skid trails across perennial streams requires a 310 permit and an approved alternative practice from DNRC.

- To construct a skid trail across a stream that is not covered under the 310 law,

the operation must be conducted as a DNRC-approved alternative practice or a pre-approved alternative practice.

## The Eastern Montana Exception:



**Eastern Zone Counties:** Big Horn, Blaine, Carter, Chouteau, Custer, Daniels, Dawson, Fallon, Fergus, Garfield, Golden Valley, Hill, Liberty, McCone, Musselshell, Petroleum, Phillips, Powder River, Prairie, Richland, Roosevelt, Rosebud, Sheridan, Toole, Treasure, Valley, Wibaux, and Yellowstone.

Roads may be constructed inside the SMZ on class 3 stream segments only in the eastern zone wherever:

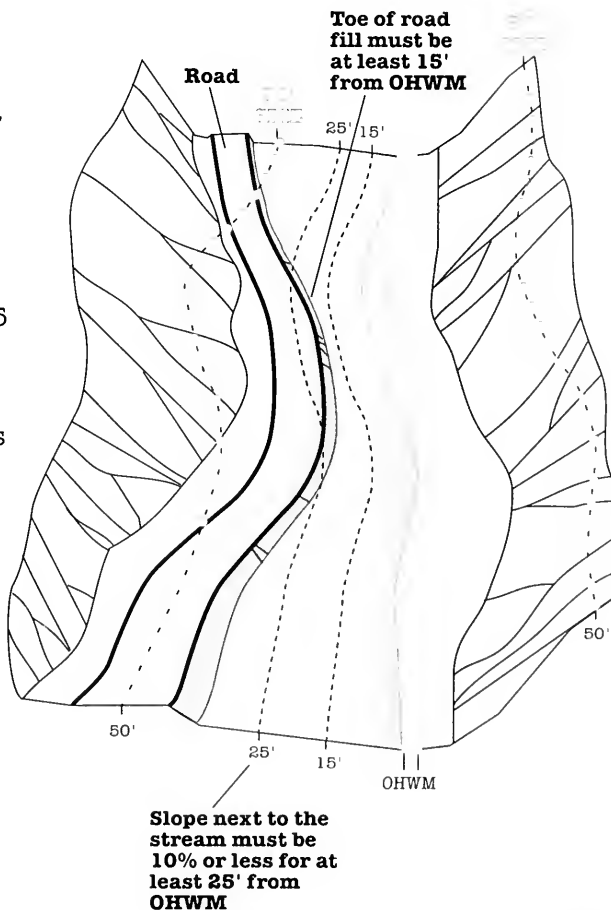
- the slope of the SMZ immediately adjacent to the stream is 10% or less for a distance of at least 25 feet from the ordinary high water mark; and

\* This booklet refers only to the Montana SMZ Law and Rules. Other federal, state or local laws may apply.

- there exists in the outer portion of the SMZ a hillside with slopes in excess of 35%; and
- the road is constructed on the gentler slopes in such a manner that:
  - cutting and filling is minimized;
  - the toe of the road fill is located at least 15 feet from the ordinary high water mark; and
  - the road is located as far away from the ordinary high water mark as is practical; and
- road drainage features are installed as needed to minimize sediment delivery to streams.
- If you have the option, locate roads outside the 50' SMZ.

## Road Construction in Eastern Zone

Class 3 Streams Only



## Hazardous or Toxic Materials

Hazardous materials are prohibited in the SMZ.

- Any storage or handling of hazardous materials in the SMZ is prohibited.
- Any application or spillage of hazardous materials that has or will enter a stream is a violation.

For example: Use of waste oil on roads within the SMZ for dust abatement is prohibited because it contains pollutants.

- Herbicides, pesticides and fertilizer are considered hazardous or toxic materials and must be applied in strict compliance with all label instructions and other laws.

## Side-casting of Road Material

The side-casting of road material into a stream, lake, wetland, or other body of water during road maintenance operations is prohibited in the SMZ.

## Slash Burning

Broadcast burning is prohibited in the SMZ.

Some common alternatives to broadcast burning are to:

- Remove the slash;
- Lop and scatter the slash;
- Hand pile and burn the slash piles.

**Note:** This rule does not apply to wildfire or burns where forest products are not being harvested.

## Depositing Slash

Depositing slash into streams, lakes, or other bodies of water is prohibited.

- Depositing slash into a stream also violates the Montana Water Quality Act and may violate the Montana Natural Streambed and Land Preservation Act. (310 Permit Program)
- Slash deposited between the ordinary high water marks of a stream, lake, or OBW would be considered a violation.
- Trees accidentally felled in or across streams, lakes, or OBW require full suspension or an alternative practice to be removed.

## Alternative Practices

Alternative practices are the "exceptions to the rules."

The seven forest practices prohibited within the SMZ may be permitted with an alternative practice. Approval for the practice must be obtained from DNRC **before** the practice begins. DNRC considers alternative practices on a case-by-case basis. Alternative practices are site-specific and can be approved only if the practice will maintain the integrity of the SMZ.

For more information on "alternative practices" please consult the rules, or contact a DNRC Service Forester.

# SMZ Field Guide

Adapted from a field guide developed  
by Plum Creek Timber, LP 1993

**STREAM** means "a natural watercourse of perceptible extent that has a generally sandy or rocky bottom or definite banks and that confines and conducts continuously or intermittently flowing water."

The SMZ law and rules apply only to drainages that meet the definition of a stream, lake or OBW.

The following field guide is set up as a key. Each step has two (possibly three) choices, all numbered or lettered the same. At each step pick the choice that fits the best. The key will then suggest a conclusion or direct you to another step.

**Note:** This brief summary is not intended to replace the rules, but to serve as reference for the broad points of them. The definitions and specific conditions detailed in the rules are essential for proper SMZ implementation.

## The 7 SMZ Prohibitions

1. Broadcast burning...p. 22
2. Equipment operations...p. 11
3. Clearcutting...p. 16
4. Road construction, except to cross stream or wetland...p. 20
5. Hazardous or toxic materials...p. 22
6. Sidecasting of road material into stream, lake, wetland or other body of water during road maintenance...p. 22
7. Slash in streams, lakes, or other water bodies...p. 23

## Stream Segment Classes

1. Stream segment supports fish • **Class 1.**
  1. Does not support fish • A.
    - A. Has surface flow 6 months or more • a.
      - a. Contributes surface flow to stream, lake, or other body of water • **Class 1.**
      - a. No surface flow contribution • **Class 2.**
    - A. Surface flow less than 6 months • b.
      - b. Contributes surface flow to stream, lake, or other body of water • **Class 2.**
      - b. Rarely contributes surface flow • **Class 3.**



## SMZ Width

A. SMZ-slope is  $\leq 35\%$ , • **50 feet & extended for adjacent wetlands**

A. SMZ-slope  $> 35\%$ , • B.

B. Class 3 stream segments and OBW • **50 feet & extended for adjacent wetlands**

B. Class 1 or 2 stream segments and lakes • a.

a. Bench occurs between 50 & 100 feet • **edge of bench.**

a. Road occurs between 50 & 100 feet • **toe of road fill.**

a. No road, no bench • **100 feet & extended for adjacent wetlands.**

## Tree Retention in SMZ

1. For Class 1 streams and lakes, • **at least 50% of trees  $\geq 8"$  DBH must be retained on each side of stream or 10 trees per 100', whichever is greater. Protect and retain shrubs and submerchantable trees.**

2. For Class 2 streams, • **at least 50% of trees  $\geq 8"$  DBH must be retained on each side of stream or 5 trees per 100', whichever is greater. Protect and retain shrubs and submerchantable trees.**

3. For Class 3 streams, lakes, and other bodies of water, • **shrubs and submerchantable trees must be protected and retained in entire SMZ to the fullest extent possible.**

## Additional Tree Retention Requirements

- If SMZ is extended for wetland, then meet the tree retention requirements of the stream class for the entire SMZ.
- If SMZ is extended for slope, then meet the tree retention requirements for first 50'.
- If the minimum number of trees  $\geq 8"$  DBH are not present • **then retain the minimum number of trees with the largest DBH available.**
- • **Retain trees representative of the size and species of the pre-harvest stand, favor leaving bank-edge trees, those leaning toward stream, those that will fall into stream and concentrate retained trees within 50' of the stream.**

# SMZ Rules

## Rule 1: (26.6.601)

### Applicability / Definitions / Effective Date

**1.** This subchapter applies to forest practices conducted within a timber sale in the streamside management zone. Such practices, as defined at 77-5-302(3), MCA, include the following activities when conducted within a "timber sale" as that term is defined below:

- a.** The harvesting of trees;
- b.** Road construction or reconstruction associated with harvesting and accessing trees;
- c.** Site preparation for regeneration of a timber stand;
- d.** Reforestation;
- e.** Management of logging slash.

**2.** Wherever used in this subchapter, unless a different meaning clearly appears from the context:

**a.** "Alternative practices" means forest practices conducted in the SMZ that are different from the practices required by the standards provided in 77-5-303, MCA, and are approved by the department either by adoption of this subchapter or on a site-specific basis upon application of the operator.

**b.** "Broadcast burning" means spreading fire through a continuous fuel cover. The fuels consist of slash resulting from forest practices, surface litter, and duff. Fuels are left in place, fairly uniform, and ignited under certain conditions with the intent to meet planned management objectives in the desired area.

**c.** "Class 1 stream segment" means a portion of stream that supports fish; or a portion of stream that normally has surface flow during 6 months of the year or more; and that contributes surface flow to another stream, lake, or other body of water.

**d.** "Class 2 stream segment" means a portion of stream that is not a class 1 or class 3 stream segment. Two common examples of class 2 stream segments are:

**i.** A portion of stream which does not support fish; normally has surface flow during less than 6 months of the year; and contributes surface flow to another stream, lake, or other body of water; or

**ii.** A portion of stream that does not support fish; normally has surface flow during 6 months of the year or more; and does not contribute surface flow to another stream, lake, or other body of water.

**e.** "Class 3 stream segment" means a portion of a stream that does not support fish; normally has surface flow during less than 6 months of the year; and rarely contributes surface flow to another stream, lake, or other body of water.

**f.** "Clearcutting" means removal of virtually all the trees, large and small, in a stand in one cutting operation. Virtually all woody vegetation is removed from the site preparatory to establishment of new trees.

**g.** "Construction" means cutting and filling of earthen material that results in a travel-way for wheeled vehicles.

**h.** "Diameter at breast height" (abbreviated "dbh") means the diameter of a tree measured 4 1/2 feet from the ground level. Ground level is the highest point of the ground touching the stem.

**i.** "Eastern Zone" means the counties of Big Horn, Blaine, Carter, Choteau, Custer, Daniels, Dawson, Fallon, Fergus, Garfield, Golden Valley, Hill, Liberty, McCone, Musselshell, Petroleum, Phillips, Powder River, Prairie, Richland, Roosevelt, Rosebud, Sheridan, Toole, Treasure, Valley, Wibaux, and Yellowstone.

**j.** "Established road" means an existing access or haul route for highway vehicles that is passable under one or more of the following circumstances:

**i.** without any work;

**ii.** with clearing of windfall or small woody vegetation;

**iii.** with surface blading;

**iv.** with replacement of stream crossing structures and drainage structures that were removed to restrict access; or

**v.** with removal of constructed access barriers.

**k.** "Hazardous or toxic material" means substances which by their nature are dangerous to handle or dispose of, or a potential environmental contaminant, and includes petroleum products, pesticides, herbicides, chemicals, and biological wastes.

**l.** "Lake" means a body of water where the surface water is retained by either natural or artificial means, where the natural flow of water is substantially impeded, and which supports fish.

**m.** "Ordinary high water mark" means the stage regularly reached by a body of water at the peak of fluctuation in its water level. The ordinary high water mark is generally observable as a clear, natural line impressed on the bank. It may be indicated by such characteristics as terracing, changes in

soil characteristics, destruction of vegetation, presence or absence of litter or debris, or other similar characteristics.

**n.** "Other body of water" means ponds and reservoirs greater than 1/10th acre that do not support fish; and irrigation and drainage systems discharging directly into a stream, lake, pond, reservoir or other surface water. Water bodies used solely for treating, transporting, or impounding pollutants shall not be considered surface water.

**o.** "Road" means a travel-way suitable for highway vehicles.

**p.** "Salvage" means harvesting trees that have been killed or damaged or are in imminent danger of being killed or damaged by injurious agents other than competition between trees.

**q.** "Side-casting" means the act of moving excess earthen material over the side of a road during road maintenance operations.

**r.** "Slash" means the woody debris that is dropped to the forest floor during forest practices. Timber slash consists of stems, branches, and twigs left behind after forest practices.

**s.** "Slope distance" means the length of a line between two points on the land surface.

**t.** "Stream," as defined at 77-5-302(7), MCA, means "a natural watercourse of perceptible extent that has a generally sandy or rocky bottom or definite banks and that confines and conducts continuously or intermittently flowing water."

**u.** "Streamside management zone" or "zone" (abbreviated "SMZ"), as defined at 77-5-302(8), MCA, means "the stream, lake, or other body of water and an adjacent area of varying width where management practices

## Streamside Management Zone Rules

### **Rule 1: (26.6.601)** continued

that might affect wildlife habitat or water quality, fish, or other aquatic resources need to be modified. The streamside management zone encompasses a strip at least 50 feet wide on each side of a stream, lake, or other body of water, measured from the ordinary high water mark, and extends beyond the high water mark to include wetlands and areas that provide additional protection in zones with steep slopes or erosive soils."

**v.** "Timber sale," as defined at 77-5-302(9), MCA, means "a series of forest practices designed to access, harvest, or regenerate trees on a defined land area for commercial purposes."

**w.** "Wetlands" means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands include marshes, swamps, bogs, and similar areas.

**3.** This subchapter shall become effective March 15, 1993. (History: Sec. 77-5-307, MCA; **IMP**, Sec. 77-5-307, MCA; **NEW**, 1993 MAR p. 14, Eff. 3/15/93.)

### **Rule 2: (26.6.602)** Width of SMZ / Marking Boundary

**1.** The slope of the SMZ is measured perpendicular to the stream or lake from the ordinary high water mark to a point 50 feet slope distance from the ordinary high water mark.

**2.** The SMZ width is 50 feet slope distance on each side of streams, lakes, and other bodies of water measured from the ordinary high water mark, in all cases except:

**a.** Where wetlands exist adjacent to the stream, lake, or other body of water, the SMZ extends to include the wetlands;

**b.** On Class 1 and 2 stream segments and lakes where the slope of the SMZ is greater than 35%, the SMZ width is 100 feet, except:

**i.** where an established road exists between 50 and 100 feet from the ordinary high water mark, the SMZ boundary is located at the toe of the road fill; or

**ii.** where the slope of the SMZ decreases to 15% or less to form a bench that is 50 to 100 feet from the ordinary high water mark and at least 30 feet wide, the SMZ boundary is located at the edge of the bench nearest the stream.

**3.** Where forest practices that are prohibited in the SMZ will be conducted adjacent to the SMZ boundary on a class 1 or class 2 stream segment, the SMZ boundary must be clearly marked prior to conducting such practices. (History: Sec. 77-5-307, MCA; **IMP**, Sec. 77-5-301, 302(8), MCA; **NEW**, 1993 MAR p. 14, Eff. 3/15/93.)

## **Rule 3: (26.6.603)** **Broadcast Burning**

**1.** Broadcast burning in the SMZ is prohibited unless approved by the department under a site-specific alternative practice. (History: Sec. 77-5-307, MCA; **IMP**, Sec. 77-5-303, MCA; **NEW**, 1993 MAR p. 14, Eff. 3/15/93.)

## **Rule 4: (26.6.604)** **Equipment Operation in the SMZ**

**1.** Operation of wheeled or tracked equipment in the SMZ except on established roads is prohibited except as provided in this rule.

**2.** In order to permit timber harvest on wetlands under conditions that protect the integrity of the SMZ, an operator may, as an alternative practice without site-specific approval, operate wheeled or tracked equipment from the outside edge of an SMZ to within 50 feet of the ordinary high water mark wherever:

**a.** the SMZ extends beyond 50 feet from the ordinary high water mark to include adjacent wetlands;

**b.** there exist winter conditions with adequate snow or frozen ground; and

**c.** operation of the wheeled or tracked equipment:

**i.** does not cause rutting or displacement of the soil;

**ii.** protects and retains shrubs and submerchantable trees to the fullest extent possible;

**iii.** does not remove stumps; and

**iv.** otherwise conserves the integrity of the SMZ.

**3.** In order to minimize road

construction and skid trails necessary for timber harvest on lands adjacent to the SMZ, an operator may, as an alternative practice without site-specific approval, cross the SMZ and the stream or other body of water with wheeled or tracked equipment on a class 3 stream segment or other body of water at locations spaced approximately 200 feet apart or more provided that:

**a.** crossings are located in areas where the stream or other body of water is dry and the banks and bottoms are stable;

**b.** excavation is minimized;

**c.** the capacity of the stream channel or other body of water is maintained; and

**d.** the distance travelled through the SMZ is minimized.

**4.** In order to minimize road construction necessary for timber harvest on lands adjacent to the SMZ, an operator may, as an alternative practice without site-specific approval, operate wheeled or tracked equipment inside the SMZ off of established roads on the side of the road away from the stream wherever:

**a.** an established road exists inside the SMZ or construction of a road inside the SMZ is authorized under ARM 26.6.606;

**b.** the toe of the road fill nearest the stream is at least 25 feet from the ordinary high water mark; and

**c.** operations are conducted in such a manner that:

**i.** wheeled or tracked equipment stays out of wetlands except under winter conditions as provided in (2) above;

**ii.** all skidding of logs takes place on designated skid trails located approximately 200 feet apart or more;

## **Rule 4 (26.6.604)** continued

**iii.** all skid trails in such areas are reclaimed by installing erosion control measures and reestablishing vegetative cover;

**iv.** drainage features are established or reestablished on all roads used under this section;

**v.** logs are not decked on the side of the road toward the stream; and

**vi.** no landings are constructed in the SMZ.

**5.** When logs are being winched or cable yarded across a class 1 or 2 stream segment by equipment located outside the SMZ, logs must be fully suspended unless otherwise authorized pursuant to the Natural Streambed and Land Preservation Act of 1975, 75-7-101 et seq., MCA.

**6.** The department may also approve operation of wheeled or tracked equipment in the SMZ as a site-specific alternative practice only under conditions that:

- a.** conserve the integrity of the SMZ;
- b.** do not cause rutting of the soil; and
- c.** protect the residual stand of shrubs and trees. (History: Sec. 77-5-307, MCA; **IMP**, Sec. 77-5-301, 303, MCA; **NEW**, 1993 MAR p. 14, Eff. 3/15/93.)

## **Rule 5: (26.6.605)** **Retention of Trees in the SMZ / Clearcutting**

**1.** The forest practice of clearcutting is prohibited in the SMZ unless approved by the department under a site-specific alternative practice.

**2.** Further, in order to provide large woody debris, stream shading, water filtering effects, and to protect stream channels and banks, merchantable and submerchantable trees must be retained in the first 50 feet of the SMZ beyond the ordinary high water mark and in the entire SMZ where the SMZ is extended for wetlands under ARM 26.6.602(2)(a), on each side of streams, and along lakes and other bodies of water as follows:

**a.** On each side of class 1 stream segments and lakes retain 50% of the trees greater than or equal to 8 inches dbh, or 10 trees greater than or equal to 8 inches dbh in each 100 lineal feet of the SMZ, whichever is greater.

**i.** If less than 10 trees greater than or equal to 8 inches dbh are present in any 100 lineal foot segment of the SMZ, then a minimum of 10 trees of the largest diameter available must be retained in that segment.

**ii.** Trees retained must be representative of the species and size of trees in the pre-harvest stand.

**iii.** Shrubs and submerchantable trees must be protected and retained in the entire SMZ to the fullest extent possible when conducting forest practices in the SMZ.

**b.** On each side of class 2 stream segments retain 50% of the trees greater than or equal to 8 inches dbh, or 5 trees greater than or equal to 8 inches dbh in each 100 lineal feet of the SMZ, whichever is greater.

**i.** If less than 5 trees greater than or equal to 8 inches dbh are present in

any 100 lineal foot segment of the SMZ, then a minimum of 5 trees of the largest diameter available must be retained in that segment.

**ii.** Trees retained must be representative of the species and size of trees in the pre-harvest stand.

**iii.** Shrubs and submerchantable trees must be protected and retained in the entire SMZ to the fullest extent possible when conducting forest practices in the SMZ.

**c.** On each side of class 3 stream segments and other bodies of water, shrubs and submerchantable trees must be protected and retained in entire SMZ to the fullest extent possible when conducting forest practices in the SMZ.

**3.** Hardwood trees and snags meeting diameter standards of (2) above may be counted toward retention tree requirements in the same approximate proportion as their occurrence in the stand prior to commencement of forest practices.

**4.** Trees retained pursuant to this rule must be distributed within the SMZ as guided by the following criteria:

**a.** favor bank-edge trees;

**b.** favor trees leaning toward the stream and those that cannot be felled without falling into the stream;

**c.** where the SMZ is greater than 50 feet wide and harvesting will result in the minimum stocking of trees required to be retained under section (2)(a) and (b), concentrate retained trees within 50 feet of the stream.

**5.** Trees retained pursuant to this rule may be salvaged only under the following conditions:

**a.** Trees to be harvested meet the definition of salvage at ARM 26.6.601(2)(p); and

**b.** The minimum tree retention requirements of section (2) are met by standing live trees, or by dead or fallen trees where sufficient standing live trees are not available; and

**c.** All trees that have fallen across or in the stream must be retained, unless salvage of such trees is approved as a site-specific alternative practice subject to other federal and state laws and regulations.

**6.** All practices which deviate from the tree-distribution criteria provided in (2) and (4) above require approval as site-specific alternative practices. (History: Sec. 77-5-307, MCA; **IMP**, Sec. 77-5-301, 303, MCA; **NEW**, 1993 MAR p. 14, Eff. 3/15/93.)

## **Rule 6: (26.6.606)** **Road Construction in the SMZ**

**1.** The construction of roads in the SMZ is prohibited except when necessary to cross a stream or wetland unless approved by the department under a site-specific alternative practice or as provided in this rule. The construction of roads across streams, wetlands or other bodies of water is not regulated by these rules but may be subject to other state and federal laws and regulations.

**2.** Road fill material must not be deposited into the SMZ except as needed to construct crossings.

**3.** In order to minimize excavation for road construction on erosive soils characteristic of Eastern Montana, an operator may, as an alternative practice without site-specific approval, construct or locate a road inside the SMZ on class 3 stream segments in the eastern zone only wherever:

# Streamside Management Zone Rules

## **Rule 6 (26.6.606)** continued

- a. the slope of the SMZ immediately adjacent to the stream is 10% or less for a distance of at least 25 feet from the ordinary high water mark;
- b. there exists in the outer portion of the SMZ a hillside with slopes in excess of 35%; and
- c. the road is constructed or located on the gentler slopes in such a manner that:
  - i. cutting and filling of earthen material is minimized;
  - ii. the toe of the road fill is located at least 15 feet from the ordinary high water mark;
  - iii. the road is located as far away from the ordinary high water mark as is practical; and
  - iv. road drainage features are installed as needed to minimize sediment delivery to streams. (History: Sec. 77-5-307, MCA; **IMP**, Sec. 77-5-301, 303, MCA; **NEW**, 1993 MAR p. 14, Eff. 3/15/93.)

## **Rule 7: (26.6.607)** Hazardous or Toxic Materials

1. The handling, storage, application, or disposal of hazardous or toxic materials in the SMZ in a manner that pollutes streams, lakes, or wetlands or that may cause damage or injury to humans, land, animals, or plants is prohibited.
2. Any application of herbicides or pesticides must be done in a manner that such materials are not introduced to streams, lakes, wetlands, or other bodies of water through surface runoff or sub-surface flow.

3. Any application of herbicides or pesticides must be done in a manner which does not destroy vegetation in the SMZ to an extent which impairs the capacity of the SMZ to provide shade or to act as an effective sediment filter.

4. Any application of herbicides or pesticides in the SMZ must be in accordance with all label directions and in compliance with all applicable laws and regulations regarding the use of such material.

5. Dust abatement agents which do not contain waste oil may be applied on roads in the SMZ provided that such material is not directly introduced into a stream, lake, or other body of water. (History: Sec. 77-5-307, MCA; **IMP**, Sec. 77-5-303, MCA; **NEW**, 1993 MAR p. 14, Eff. 3/15/93.)

## **Rule 8: (26.6.608)** Side-casting of Road Material

1. The side-casting of road material into a stream, lake, wetland, or other body of water during road maintenance operations is prohibited in the SMZ. (History: Sec. 77-5-307, MCA; **IMP**, Sec. 77-5-303, MCA; **NEW**, 1993 MAR p. 14, Eff. 3/15/93.)

## **Rule 9: (26.6.609)** Depositing Slash

1. Depositing slash in streams, lakes, or other bodies of water is prohibited unless approved by the department under a site-specific alternative practice subject to other state and federal laws and regulations. (History: Sec. 77-5-307, MCA; **IMP**, Sec. 77-5-303, MCA; **NEW**, 1993 MAR p. 14, Eff. 3/15/93.)



## **Rule 10 (26.6.610)**

### **Site-specific Alternative Practices**

**1.** The owner or operator shall comply with the management standards stated in 77-5-303(1), MCA, and this subchapter, unless approval has been obtained from the department for alternative practices designed for site-specific conditions encountered during a timber sale prior to conducting such practices.

**2.** The department may approve a proposed alternative practice only if such practice would be otherwise lawful and the department determines with reasonable certainty that the proposed alternative practice would conserve the integrity of the streamside management zone and would not significantly diminish the function of the zone as stated in 77-5-301, MCA:

- a.** to act as an effective sediment filter to maintain water quality;
- b.** to provide shade to regulate stream temperature;
- c.** to support diverse and productive aquatic and terrestrial riparian habitats;
- d.** to protect stream channel and banks;
- e.** to provide large, woody debris that is eventually recruited into a stream to maintain riffles, pools, and other elements of channel structure; and
- f.** to promote floodplain stability.

**3.** In order to obtain department approval of alternative practices, the owner or operator shall submit to the department an application describing the proposed practices and location. Applications must provide all data specified by the department and must be submitted on forms provided or approved by the department.

**4.** Within 10 working days of receipt of the application for approval of alternative practices the department shall determine if the application is approved, approved with modification, disapproved, incomplete, requires additional information or environmental analysis, or requires a field review. The department shall notify the owner and the applicant of its decision in writing.

**5.** If the department determines a field review is necessary, the field review must be made at a mutually agreeable time. The owner or his designee must be present at the field review.

**6.** Within 10 working days after all necessary field review is complete, the department shall determine whether the application is approved, approved with modification, disapproved, incomplete, or requires additional information or environmental analysis. The department shall notify the owner and the applicant of its decision in writing.

**7.** The department may notify the applicant in writing that it declines to conduct further environmental analysis of an application if it determines that the proposed alternative practices are complex, or affect an environmentally sensitive area, or involve a high degree of uncertainty that the proposed alternative practices will have a significant impact on the quality of the human environment. The notice must briefly describe the department's reasons for declining to conduct further analysis. In this case, the applicant may conduct further environmental analysis and submit documentation to the department. The department shall independently review any further environmental analysis and documentation of the proposed alternative practices provided by the applicant and may adopt such documentation if it is

# Streamside Management Zone Rules

## **Rule 10** (26.6.610) continued

adequate under the Montana Environmental Policy Act (75-1-101 et seq., MCA) and rules adopted thereunder (ARM 26.2.628-663). If so adopted, the department may utilize such environmental documentation in further consideration of the application for alternative practices.

**8.** In the event the department determines that an application for alternative practices may be of significant interest to the public, the time provided in this rule for considering such application may be extended in order to allow time for the public to be notified and participate in the department's decision pursuant to 2-3-101 et seq., MCA, and ARM 26.2.701-707.

**9.** Persons applying for approval of alternative practices shall agree in writing that approved alternative practices, including any additional conditions imposed by the department, shall have the same force and authority as the standards contained in 77-5-303, MCA, and shall be enforceable by the department under 77-5-305, MCA, to the same extent as such standards. Persons responsible for conducting alternative practices shall comply with all conditions of such practices. In determining whether to approve applications for alternative practices, the department may consider past violations of such standards or of the requirements of previously approved alternative practices by the applicant.

**10.** Authorization to conduct alternative practices is valid for 2 years from the date of approval or for such period as may be specified by the department. (History: Sec. 77-5-307, MCA; **IMP**, Sec. 77-5-302, 307, MCA; **NEW**, 1993 MAR p. 14, Eff. 3/15/93.)

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